

A SOCIO-POLITICAL ANALYSIS OF MIGRATION AND ECONOMIC DEVELOPMENT NEXUS IN NIGERIA

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Abstract

This study explores the impact of migration of healthcare workers on economic development in Nigeria from 2015-2023. Through the lens of Everett Lee Push and Pull theory of migration Nigeria had experienced missed opportunities, low development and frustrated hope. The failure of governance is seen in poor economic performance, causing suffering and unfulfilled expectations leading to political instability, conflict, insurgency etc. These conditions have led to massive migration of trained professional like doctors and nurses to developed countries. This study seeks to look at the impact of international migration in economic development of Nigeria. International Migration is an ever-growing phenomenon that has important development implications which leads to increased income and poverty reduction, improved health care services, raised educational standards and promotes economic development. Yet those gains might come at substantial social costs to the migrant and their families, since, many developing countries are also large recipients of international migrant. In conclusion, the study looks at few policy recommendations calling for better integration of migration in the country's development policies.

KEYWORDS: Migration, Economic development, Everett Lee Push and Pull theory.

1. INTRODUCTION

Migration has been a significant feature of human existence, influencing economic, social, and political landscapes globally. In Nigeria, migration, both internal and international, has played a pivotal role in shaping the country's economic development. The phenomenon is driven by various factors, including economic opportunities, environmental changes, conflicts, and demographic dynamics. Migration patterns in Nigeria have evolved over time, influenced by historical, colonial, and post-colonial developments. The pre-Colonial and Colonial Migration Scholars have noted that migration during the pre-colonial era was influenced by trade and subsistence agriculture (Adepoju, 2006). The colonial economy further accelerated rural-urban migration, as the demand for labor in urban centers and cash crop plantations increased (Mabogunje, 1970). The Post-Independence Migration Since gaining independence, Nigeria has experienced diverse migration flows, shaped by economic, social, and political factors. Okome (2002) highlights the increasing trend of international migration, driven by globalization and economic disparities. Migration often stems from the quest for better economic opportunities. According to Afolayan (2009), high unemployment rates and poverty levels in rural areas push individuals to seek opportunities in

urban centers or abroad. Internal displacement due to conflicts such as the Boko Haram insurgency in the Northeast has led to significant migration flows (Adelaja & George, 2019). This has also spurred cross-border migration to neighboring countries. Environmental changes, including desertification in northern Nigeria and flooding in coastal regions, have increasingly influenced migration patterns (Nzeadibe et al., 2011). Nigeria's rapid population growth, coupled with limited resources, exacerbates migration as individuals seek better livelihoods elsewhere (Fayomi, 2013). Migration has both positive and negative implications for Nigeria's economic development; Remittances are a critical source of external finance for Nigeria. According to the World Bank (2021), remittances accounted for approximately 4% of Nigeria's GDP in recent years, significantly contributing to household incomes and poverty alleviation. Migrants often acquire skills and experiences abroad, which can contribute to national development if effectively harnessed (Omoniyi, 2013). Negatively, the emigration of skilled professionals, particularly in healthcare and education, has adversely affected critical sectors (Oluwatayo & Ojo, 2018). Rural-urban migration has strained infrastructure in major cities, leading to the growth of informal settlements and increased socio-economic inequality (Olajide et al., 2018). Thus the negative impact of migration which include the migration of healthcare professionals, often referred to as "brain drain," poses a significant challenge to healthcare service delivery in Nigeria.

Over the past few decades, there has been a steady outflow of Nigerian doctors, nurses, and other healthcare workers to developed countries such as the United States, the United Kingdom, Canada, and the Gulf States. This trend is driven by several factors, including inadequate remuneration, poor working conditions, lack of career development opportunities, and limited access to modern medical facilities. In contrast, destination countries offer higher salaries, better job security, and more advanced healthcare systems. The impact of this migration on Nigeria's healthcare system is profound. The country faces a severe shortage of healthcare professionals, particularly in rural and underserved areas, where healthcare needs are most acute. This shortage affects the quality and availability of healthcare services, leading to longer wait times, overburdened healthcare facilities, and higher patient-to-doctor ratios. Consequently, many Nigerians are unable to access timely and adequate medical care, contributing to poor health outcomes and increased mortality rates.

Furthermore, the loss of experienced healthcare professionals hampers the transfer of knowledge and mentorship within the local healthcare system. Younger or less experienced healthcare workers often lack the necessary guidance and training to manage complex medical cases effectively. This situation is exacerbated by limited government investment in healthcare infrastructure and insufficient policy measures to retain skilled professionals. Healthcare turnover rates in Nigeria have reached alarming levels, particularly due to the migration of skilled healthcare professionals to more developed countries. This high turnover is driven by a combination of push factors, including poor working conditions, inadequate compensation, and limited career advancement opportunities. According to Akinyemi and Atilola (2013), the lack of investment in healthcare infrastructure and persistent challenges such as workplace burnout and insecurity further exacerbate turnover rates in the sector. The frequent loss of healthcare professionals negatively affects service delivery, resulting in staff shortages and increased workloads for those who remain. Olajide et al. (2018) argue that high turnover rates compromise the quality of patient care, reduce staff morale, and increase healthcare costs due to the need for frequent recruitment and training of new personnel. Moreover, the departure of experienced healthcare workers leaves a gap in institutional knowledge and mentorship, weakening the healthcare system's capacity to respond to complex health challenges. While the outflow of healthcare professionals poses

significant challenges, the remittances they send back play a crucial role in Nigeria's economy. The World Bank (2021) notes that Nigeria is one of the top recipients of remittances in sub-Saharan Africa, with inflows accounting for a substantial portion of its GDP. These remittances are often used to support household consumption, education, and healthcare expenses, thereby indirectly benefiting the local economy. Fayomi (2013) highlights that remittances can have a positive developmental impact by reducing poverty and fostering investment in small businesses.

However, these benefits are often unevenly distributed, with rural and underserved communities receiving less direct benefit. Additionally, Omoniyi (2013) cautions that reliance on remittances may mask the long-term negative effects of brain drain, particularly in critical sectors such as healthcare. Addressing the high turnover rate in Nigeria's healthcare sector requires a multifaceted approach. Adepoju (2011) suggests that improving working conditions, offering competitive salaries, and creating clear career development pathways are essential to retaining skilled healthcare workers. Moreover, policies aimed at engaging the Nigerian Diaspora could help mitigate some of the adverse effects by promoting knowledge transfer and investment in the health sector. It is against this background that the study examines the relationship between migration and economic development in Nigeria between 2015 and 2024. The study has both broad and specific objectives. The broad objective of this study was to examine the impact of migration and economic development of Nigeria 2015-2023. Specifically, the study seeks to achieve the followings: (1) To determine how migration of health workers impacted on health care service delivery in Nigeria between 2015 and 2023. (2) To ascertain how health care turnover rate impact on foreign remittance in Nigeria between 2015 and 2023.

2. LITERATURE REVIEW

In this section we conducted a literature review, anchored on the major themes drawn from our research question. The aim of the review was to identify viable gaps that will drive the study. In the light of the above we reviewed extant literature accounting for migration and economic development of Nigeria 2015-2023. The literature extensively discusses the critical issue of human capital flight, particularly the migration of healthcare professionals from Nigeria, often termed as "brain drain," and its multifaceted implications. It also explores the role of remittances as both a consequence and a potential buffer against the adverse effects of migration. This review synthesizes empirical findings and theoretical debates on how migration impacts Nigeria's healthcare system, economy, and social development.

1. Migration of Healthcare Workers and Service Delivery

Impact on Healthcare System:

The migration of healthcare professionals from Nigeria significantly hampers the nation's capacity to meet its health needs. Akinyemi and Atilola (2013) highlight that the loss of doctors, nurses, and other health workers to developed countries creates severe shortages, especially in rural and underserved areas. Oluwatayo and Ojo (2018) emphasize that this uneven distribution results in poor maternal and child health outcomes and weakens the overall health service quality. Olajide et al. (2018) note that remaining staff are overburdened, leading to burnout and substandard care, while the country struggles to keep pace with medical innovations as experienced professionals migrate abroad.

Economic and Systemic Consequences:

Brain drain leads to substantial economic costs, including the wastage of resources spent on training professionals who eventually emigrate (Akinyemi & Atilola, 2013). Nigeria's dependence on foreign-trained professionals increases, undermining efforts to develop a self-sufficient health workforce. Critical medical fields such as surgery, emergency medicine, and public health are particularly affected, reducing the system's efficiency and capacity to deliver comprehensive care (Oluwatayo & Ojo, 2018). The migration also results in occupational distortions, with many Nigerian-trained doctors working as low-skilled laborers abroad, exemplifying brain waste (Emeghara, 2013).

Push and Pull Factors:

Drivers of migration include push factors like poor working conditions, inadequate wages, lack of career progression, and insecurity, which compel health professionals to seek opportunities abroad (Akinyemi & Atilola, 2013). Conversely, pull factors such as better salaries, advanced facilities, and improved living standards in destination countries attract Nigerian health workers (Oluwatayo & Ojo, 2018). Policy responses have been inadequate; scholars advocate for improved remuneration, better infrastructure, and incentives for rural postings to retain health workers.

Historical Context and Broader Impacts:

Historically, the late 70s and early 80s saw Nigerian doctors migrating to the Middle East, leading to a doctor-to-population ratio as dire as 1:41,000—far below WHO standards—exacerbating health indices (Emeghara, 2013). The ongoing brain drain results in backwardness, loss of tax revenue, and depletion of human capital, hindering national development. Empirical studies (Beine et al., 2008; Schiff, 2005) link brain drain to reduced human capital formation, economic growth, and welfare.

Theoretical Perspectives:

Scholars debate whether brain drain is transitory or promotes divergence in global income distribution. Mountford and Rapoport (2007) model the effects of skilled migration on income

disparities, finding that high emigration from developing countries can lead to divergence, worsening inequality. Frederic Docquier (2023) underscores institutional weaknesses, suggesting that the migration of skilled labor worsens governance and economic welfare in source countries, including Nigeria.

Global and Local Debates:

Georfrey Gooch (2007) and others emphasize that brain drain hampers development, as the loss of high human capital diminishes innovation and productivity. Migration is classified as internal or international, voluntary or forced. Nigeria experiences significant internal and external migration, with academic and medical professionals seeking better conditions abroad, leaving the local system under-resourced (Odekunle, 2001). The Nigerian university system, for instance, has suffered from underfunding, leading to faculty exodus, dilapidated infrastructure, and brain waste (Mbanefo, 1992).

Consequences for Education and Medical Sectors:

The Nigerian educational sector faces decline, with shortages of qualified staff, inadequate resources, and poor motivation, which fuel further brain drain. The health sector suffers from similar issues; approximately 14% of Nigerian-trained physicians work abroad, primarily in the US and UK (Clemens & Pettersson, 2017). The health sector's human resource crisis manifests as a low doctor-to-population ratio (~1:4000-5000) and poor health outcomes, further compounded by emigration (NMA, 2022).

Diaspora and Potential Solutions:

Despite challenges, the Nigerian diaspora represents a resource for knowledge transfer, remittances, and collaborations. Scholars like Fayomi (2013) advocate leveraging diaspora expertise for health system development, while remittances from abroad serve as vital income sources for households, indirectly supporting health and education investments. However, reliance on remittances risks fostering dependency rather than systemic reform, as noted by scholars (Omoniyi, 2013).

2. Healthcare Turnover and Foreign Remittances

Drivers of Healthcare Workforce Turnover:

Poor working conditions, inadequate pay, and limited professional growth opportunities cause high turnover in Nigeria's healthcare sector (Akinyemi & Atilola, 2013). This cycle overburdens remaining staff, leading to burnout, further attrition, and diminished service quality (Olajide et al., 2018). The loss of experienced health professionals hampers Nigeria's capacity to address critical health issues, including maternal mortality, infectious diseases, and emergency care (Oluwatayo & Ojo, 2018).

Economic Implications:

High turnover imposes significant costs—recruitment, training, and temporary understaffing—stretching Nigeria's healthcare budget. The dependency on foreign-trained health workers and aid diminishes the drive for sustainable local capacity building (Akinyemi & Atilola, 2013). Conversely, remittances sent by emigrated health workers provide financial relief to families and contribute to Nigeria's GDP, playing a paradoxical role by offering economic buffers but not replacing the need for a robust local health workforce (World Bank, 2021).

Remittances and Development:

Remittances, which include cash, social capital, and in-kind support, are crucial for poverty alleviation, education, and health expenditures (Fayomi, 2013). Nigeria ranks among top remittance-receiving countries, with inflows surpassing FDI and aid (World Bank, 2023). They help stabilize the economy, offset foreign exchange shortages, and contribute to local consumption and investment (Olowa, 2013). However, over-reliance on remittances can discourage systemic reforms, perpetuating dependency (Akinpelu et al., 2013).

Theoretical Foundations:

Migration theories, such as Todaro's model, explain remittance behavior as motivated by income differentials and risk-sharing motives (Todaro, 1969). Empirical evidence suggests that remittances directly reduce poverty (Waheed et al., 2013; Adams & Page, 2005) and stimulate local enterprise, though their effect on macroeconomic stability remains contested. Some studies highlight negative impacts, such as Dutch Disease effects, where inflows cause currency appreciation and undermine export competitiveness (Khurshid et al., 2018).

Impact on Nigeria's Economy:

Despite the positive contributions, studies (Raimi & Ogunjirin, 2012) indicate that remittances may exert a negative effect on Nigeria's GDP through exchange-rate appreciation. The inflows tend to increase consumption and imports, potentially leading to trade imbalances. Nonetheless, remittances remain a vital financial resource, accounting for a significant portion of Nigeria's budget and foreign exchange reserves.

Conclusion:

The literature underscores that Nigeria faces a complex interplay between brain drain, healthcare workforce shortages, and remittance inflows. While migration of health professionals severely weakens Nigeria's health system, remittances offer short-term economic relief but do not substitute systemic reforms. Addressing push factors—poor working conditions, limited career opportunities, and insecurity—is essential to stem the tide of migration. Simultaneously, engaging the diaspora for knowledge transfer and leveraging remittances for development could create pathways toward sustainable improvement. Ultimately, coordinated policies that focus on health sector strengthening, educational reforms, and economic diversification are necessary to mitigate the adverse effects of brain drain and harness the potential benefits of remittances for Nigeria's development.

Gap in literature

A review of the existing literature the scholars were grouped in bloc in proposing and counter arguments of opposing. The empirical study of other countries was reviewed thus having accessed these studies; these scholars have not paid sufficient attention to the developing countries of sub-Saharan Africa most especially Nigeria, hence have not reported sufficiently on economic trends in Nigeria and their link to patterns of migration. Scholars have attempted a broad analysis of the subject matter but further research is required to specifically understand how such economic indicators of per-capita income and poverty rate are affected by brain drain and foreign remittance. Furthermore, there is the lack of research on the subject matter by indigenous scholars. This literature review also highlighted the need for current analysis of the subject matter as out of the over 40 publications reviewed only a few fell within the twenty first century. The review also highlighted a lack of studies on the economy and migration in Nigeria. The link between migration and economic development is not well reported on in Nigeria hence it is important to address the salience of both phenomena in understanding the developmental trajectory of Nigeria. Finally, there is dearth of literature on the extent migration of health workers impacted on healthcare service delivery in Nigeria and the extent healthcare turnover rate impacted on foreign remittances in Nigeria.

3. METHODOLOGY

Research methodology offers a thorough plan to assist keep the researcher on track, lends credibility to the study and yields conclusions with scientific validity. This study employed Qualitative method of data collection based on documentary and content analysis approaches however, Ex post facto research design was employed as the research design. This design is most suitable for this study because it involves an in-depth investigation of a specific subject and phenomenon with the study focus being Migration and Economic development in Nigeria 2015-2023. The data for this study were collected from secondary sources, including government publications, newspapers, archival materials, textbooks, and published official documents relevant to the study. The collected data from these documents were interpreted and qualitatively described to address gaps in the literature and provide potential recommendations.

3.1 THEORETICAL FRAMEWORK

This study uses Everett Lee's push and pull theory of migration. Everett Lee offered a complete theory of migration in 1966. Lee's thesis outlines elements that cause population migration in any place. These considerations include the place of origin, the place of destination, intervening impediments, and personal characteristics. The major propositions are as follows:

- Each place has a set of push (negative) and pull (positive) variables. Positive aspects act to keep individuals inside it or attract people from other places, whilst negative factors tend to repel them (Lee, 1975:191). In addition, there are elements that remain neutral, to which people are largely indifferent. While some of these characteristics affect the majority of people in the area, others tend to have differing effects.
- Migration in any area is the result of the interaction of several forces. Push factors are conditions that can push people to leave their homes and are linked to the country from which they move. Push factors include a lack of sufficient livelihood opportunities, poverty, rapid population growth that outpaces available resources, "primitive" or "poor" living conditions,

desertification, famines/droughts, fear of political persecution, inadequate healthcare, wealth loss, and natural disasters. Pull factors are the inverse of push forces; they attract people to a specific region.

- Pull factors for a location include better job opportunities and living conditions, easy access to land for agriculture, political and religious freedom, superior education and welfare systems, improved transportation and communication, a stress-free environment, and security.
- According to Lee, migrants have a near-perfect understanding of elements in their home country due to their long-term association. However, this is not always the case in the destination location. There is usually some level of ignorance and ambiguity about how migrants are received in their new environment (Lee, 1975:192).
- Perceived differences between origin and destination places vary depending on an individual's life stage. Long-term attachment to a location might lead to overestimation of good aspects and underestimation of negative ones. At the same time, perceived challenges may result in an incorrect assessment of good and negative elements in the destination place.
- Moving decisions are not solely based on the positive and negative circumstances at the origin and destination. The balance in favour of the action must be sufficient to overcome natural inertia and intervening barriers. The distance between the points of origin and destination has been mentioned more frequently in this context by authors, but according to Lee, distance, while ubiquitous, is by no means the most relevant aspect. Furthermore, the impact of these intervening barriers differs from person to person.
- Personal characteristics play a significant role in promoting or hindering migration in any area, in addition to location and constraints. Some of them remain more or less consistent throughout an individual's life, while others change depending on the stage of the life cycle. It should be highlighted that the actual circumstances at the points of origin and destination is less essential in determining migration than the individual's perception of these elements. Perception is heavily influenced by personal variables such as consciousness, intelligence, contacts, and the individual's cultural environment.
- All of these reasons contribute to the decision to migrate. Lee noted that the decision to migrate is never entirely reasonable. It is also worth noting that not everyone who migrates does so voluntarily. Children and wives migrate with the family, and their decisions are not always involved. After defining the causes at origin and destination, as well as the intervening impediments and personal factors, Lee goes on to develop a series of hypotheses about the amount of migration, streams and counter-streams, and migrants' characteristics.

3.1.1 Application of Theory

According to the push and pull theory, migration is induced by a combination of push (negative) and pull (positive) causes. Positive aspects act to keep individuals inside it or attract people from other places, whilst negative factors tend to repel them (Lee, 1975:191). In the application of this theory to the Nigerian instance, there are forces that remain neutral, and people are essentially indifferent.

While some of these characteristics have a broad impact on the community, others have a more targeted impact. Migration in any area is the net effect of the interaction of these causes. Push factors are conditions that can push people to leave their homes and are associated with the country from which they move. Push factors include the lack of enough livelihood opportunities, poverty,

rapid population growth that exceeds available resources, "primitive" or "poor" living conditions, desertification, famines/droughts, fear of political persecution, poor healthcare, loss of wealth, and natural disasters.

In Nigeria, unmet basic needs, corruption, extrajudicial killings, and insufficient government support lead to brain drain and lower per capita income. Pull factors are the inverse of push forces; they attract people to a specific region. Typical examples of a place's pull factors include more job opportunities and better living conditions, easy availability of land for settlement and agriculture, political and/or religious freedom, superior education and welfare systems, better transportation and communication facilities, a better healthcare system and stress-free environment, and security. In analyzing these, migrants shift for a better living and security. These have an impact on the economies of the originating and destination countries. Migrants, in turn, send money as remittances to their home country, which has an impact on the poverty rate, either lowering or raising it, as well as the state's overall economy.

3.2 Hypotheses

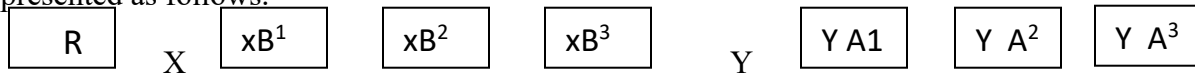
1. Migration of health workers impacted on health care service delivery in Nigeria between 2015 and 2023.
2. Health care turnover rate impact on foreign remittance in Nigeria between 2015 and 2023.

3.3 Research Design

Research design is a blueprint that tells us how to reach plausible answers. According to Obasi (1999) as in Aniche and Efanodor (2018, p.315), "research design is simply a plan that specifies how data should be collected and analyzed". Kerlinger (1973) in Biereenu-Nnabugwu, (2006, p.101) also pointed out that "research design includes an outline of what the investigator will do from writing the hypotheses and their operational implications to the final analysis of data". Simply put research plan that provides necessary detail about the structure and strategy of the research at hand. It explains what you intend to do in the research process, how you plan to carry it out and why you have chosen a particular process to do it. The study adopted the ex-post-facto research design. The ex-post-facto research design refers to "as after-the-fact" research design, examines the independent variables and dependent variables after the events occurred and the data already exist. The ex-post-facto method, according to Kerlinger (1977) is a type of descriptive analysis in which an independent variable has already occurred; investigators begins with the evaluation of a dependent variable, and then analyze the independent variable in hindsight for its possible relationship to and impact on the dependent variable. It is simply a kind of research design where events that are being observed have taken place already. In other words, according to Aniche and Efanodor (2018, p.319) "data collected after the event or phenomenon under investigation has taken place". Ex-post facto design is non-experimental; however, it is sometimes classified as quasi-experimental design. Ex-post facto design usually involves study of independent and dependent variables but has no control variable and it does not randomize experimental and control variables (Aniche and Efanodor, 2018). Thus, it does not create the chance for manipulation of independent variable and does not randomize assignment. In terms of method of data collection, ex-post facto design usually adopts qualitative methods like documentary method. In addition, in

the case of method of data analysis, adopts qualitative methods like documentary method, qualitative-descriptive method etc.

In ex-post facto design, the test of the hypothesis involves observing the independent and dependent variables at the same time because the effects of the former on the later have already taken place before the investigation. In other terms, the ex-post facto design seeks to define the inherent trigger for a specific outcome without the objective variable being manipulated. The attempt made by this study is to connect certain existing effects or observations with some causative agents or variables. It implies that the study which investigate possible cause-effect relationships by observing an existing condition and searching back in time for plausible causal factors. The ex-post facto or single-case assumes the form of an experimental design where an existing case is X observed for some time in order to study or evaluate it. The single case design is presented as follows.



Where:

- R - Random Assignment of subject
- X - Independent Variables (Migration)
- Y - Dependent Variable (Economic development of Nigeria)
- XB - Before observation of X variable (Independent)
- YA - After observation of Y variable (Dependent)

Ex-post facto involves a quasi-experimental study examining how an independent variable present prior to the study, affects a dependent variable. In this research the EX here is Migration (specifically Migration of health workers and Health care turnover rate) the post is incidence of poverty (thus the research tries to find a causal link between the EX which is the independent variable and the post which is the dependent variables. In testing hypothesis (1) migration of health workers impacted on health care service delivery in Nigeria between 2015 and 2023. The study sees hypothesis (1) migration of health workers as (X) variables and health care service delivery in Nigeria as (Y) variables. The empirical referent of X is Over 7000 Nigerian Medical doctors practicing in the United states (Association of American Colleges 2020), 12,000 Nigerians professionals (like Engineers, Nurses) Migrated to UK between 2015-2022 (UK Health service 2020) and 40% Of Nigeria healthcare workforce has emigrated to countries like Canada, UK, US among other (WHO 2019). The empirical referent of Y is Shortage of specialized professionals in key health sectors (Nigerian Ministry of Health 2020), Delayed and abandonment projects due to skill gaps (Nigerian ministry of works 2023) and Increased Workload and burnout among remaining professionals. Testing hypothesis (2) which states that health care turnover rate impact on foreign remittance in Nigeria between 2015 and 2023. The study sees health care turnover rate as the X variable and foreign remittance in Nigeria as Y variable. Thus, the empirical referent of X variable is Vacancy rate, 53% of clinicals and staff reported burn out and 30% of clinicals and 41% of staff left their position within 2-3 years. The empirical referent of Y variable is 2015-\$21.5 billion (World bank 2023), 2016-\$ 19.7 billion World bank (2022), 2017-\$22.0 billion

World bank (2022), 2018-\$ 25.1 billion World bank (2022), 2019-\$ 25.9 billion World bank (2022), 2020-\$ 17.2 billion World bank (2022), 2021-\$ 19.2 billion World bank (2022), 2022-\$ 20.1 billion World bank (2022) and 2023-\$ (Q1-Q2); \$ 10.5 billion Source CBN 2023).

3.4 Methods of Data Collection

Methods are techniques of data gathering and drawing of inferences from data. It is also use for making interpretations and forecasts (Cohen and Manion, 1980). Ifesinachi (2010, p.12) stated differently, as he indicated that it deals with how to produce the necessary evidence or facts to check the conclusions and address the question(s) presented in the issue statement. However, according to scholars like Kothari (2012) and Ndubuisi and Chukwuma (2016, p.35), data collection is “the process of getting and measuring information on variables on interest in an established systematic fashion that enables one to answer stated research questions, test hypothesis and evaluate outcomes”. The study relied on qualitative method as the most preferable because this analysis is focused on non-statistically dependent and immeasurable results which can be empirically tested (McNabb, 2005).

The qualitative methods of data collection are sometimes referred to as documentary methods. The qualitative methods of data collection are the gathering of information in forms of words, pictures, descriptions, narratives or other non-numeric documents and among others. Use evidence, which goes beyond a clear description of events and anomalies, provides the framework on which to consider subjective interpretation and critical analysis. This data collection approach is appropriate because it focuses on non-statistical dependent, numerically immeasurable data which can be empirically analysed. The qualitative approach is not the creation of an empirical or mathematical equation between variables but the establishment of relationships and significance within social or concrete reality. Significantly, it interacts with the real-world situation, often without artificial and associated statistical manipulations, through performing the research in natural settings. Importantly, its analyses the actions and behaviours of people using ordinary or human language instead of empirical, predictive or graphical methods. While it does not evaluate theories in statistical terms, the approach is deductively rational. This approach used in this analysis is to obtain in-depth information, definition and explanation of the variable to promote instrument design and pilot studies.

Therefore, it guarantees access to the inner recesses of social existence, organizational structure and character, bureaucratic processes and human reasons for action (Spector, 1981). The data obtained came from historical records, such as administrative and official papers, and other related references are based on this method used in this analysis. The study also, utilizes secondary data sources such as textbooks, magazines, conference reports, e-books, e-journals and among others.

3.5 Method of Data Analysis

The analysis of data generated was done using the qualitative descriptive method of data analysis which will be anchored on content analysis. According to Asika (2006, p.6) qualitative analysis essentially has to do with “summarizing the information generated in the research so that appropriate analytical tools could be used to further discover the relationship among variables”. The adoption of qualitative descriptive method is inevitable since the study shall depend essentially on the documentary method of data collection which depends largely on secondary sources of data. This method is mainly used in analysing qualitative data or data collected through qualitative methods. Qualitative methods of data analysis are qualitative descriptive analysis used in verbally summarizing the information generated in the research. Qualitative descriptive analysis is

therefore a descriptive verbal analysis which involves interpretation, description and explanation of qualitative data from documents (Bonn and Michael' 2018, p.61).

Content analysis as the name suggest, focuses at the comprehensive examination of documents in order to generate information for interpretation relying on the standards of scientific research (Biereenu-Nnabugwu, 2006, p.253). Thus, content analysis is a qualitative research which involves a systematic evaluation of texts which is used to make valid and replicable inferences by interpreting and coding textual material. The researcher guarantees objectivity by carrying out the analysis according to explicit rules or procedures that enable other researchers to obtain the same results from the same messages or documents. In a systematic content analysis therefore, the inclusion or exclusion of content is done according to consistently applied criteria of selection. In using content analysis, the researcher can systematically analyse the data obtained from archival records, documents and mass media. Content analysis is a method of data analysis as well as a method of observation and data gathering and classified as qualitative method of data analysis (Frankfort 1996, p.51). Content analysis is a method of deducing the motive of the writer through the collation of frequency of certain words, concepts and terms. It is also used to identify critical themes or categories to obtain some trends. The tables and charts were also interpreted and analysed using qualitative content analysis method.

3.6 Logical Data Frame Work

	RESEARCH QUESTION	HYPOTHESIS	MAJOR VARIABLE X AND Y	MAIN INDICATORS OF X AND Y VARIABLES	SOURCES OF DATA	METHOD OF DATA COLLECTION/ RESEARCH DESIGN	METHOD OF DATA ANALYSIS/ THEORETICAL FRAME WORK
1	To what extent has migration of health workers impacted on health care service delivery in Nigeria between 2015 and 2023?	Migration of health workers impacted on health care service delivery in Nigeria between 2015 and 2023	(X) Migration of health workers	(X) <ul style="list-style-type: none"> Over 7000 Nigerian Medical doctors practicing in the United states (Association of American Colleges 2020). 12,000 Nigerians professionals (like Engineers, Nurses) Migrated to UK between 2015-2022 (UK Health service 2020) 40% Of Nigeria healthcare workforce has emigrated to countries like Canada, UK, US among other (WHO 2019) 	Secondary source of data- textbook, journal articles, book chapters, official documents and other articles.	Documentary method of data collection	Qualitative method of data analysis Lee's Push and pull theory of Migration
			(Y) health care service delivery in Nigeria between 2015 and 2023	<ul style="list-style-type: none"> Shortage of specialized professionals in key health sectors (Nigerian Ministry of Health 2020). Delayed and abandonment projects due to skill gaps (Nigerian ministry of works 2023) Increased Workload and burnout among remaining professionals 			

	RESEARCH QUESTION	HYPOTHESIS	MAJOR VARIABLE X AND Y	MAIN INDICATORS OF X AND Y VARIABLES	SOURCES OF DATA	METHOD OF DATA COLLECTION/ RESEARCH DESIGN	METHOD OF DATA ANALYSIS/ THEORETICAL FRAME WORK
2	To what extent does health care turnover rate impact on foreign remittance in Nigeria between 2015 and 2023?	Health care turnover rate impact on foreign remittance in Nigeria between 2015 and 2023	(X) Health care turnover rate	(X) <ul style="list-style-type: none"> • Vacancy rate • 53% of clinicals and staff reported burn out • 30% of clinicals and 41% of staff left their position within 2-3 years. 	Secondary source of data-textbook, journal articles, book chapters, official documents and other articles.	Documentary method of data collection	Qualitative method of data analysis Lee's Push and pull theory of Migration
			(Y) Foreign remittance in Nigeria between 2015 and 2023	(Y) 2015-\$21.5 billion (World bank 2023) 2016-\$ 19.7 billion World bank (2022) 2017-\$22.0 billion World bank (2022) 2018-\$ 25.1 billion World bank (2022) 2019-\$ 25.9 billion World bank (2022) 2020-\$ 17.2 billion World bank (2022) 2021-\$ 19.2 billion World bank (2022) 2022-\$ 20.1 billion World bank (2022) 2023-\$ (Q1-Q2); \$ 10.5 billion Source CBN (2023)	Secondary source of data-textbook, journal articles, book chapters, official documents and other articles.		

4.MIGRATION OF HEALTH WORKERS AND HEALTH CARE SERVICE DELIVERY IN NIGERIA BETWEEN 2015 AND 2023

Between 2015 and 2023, Nigeria experienced a significant outflow of healthcare professionals, including doctors and nurses, driven by push factors like poor working conditions, inadequate pay, limited career growth, and political instability, alongside pull factors such as better opportunities and incentives abroad (UK, US, Canada). This migration has severely impacted Nigeria's health system, which already faces challenges from high disease burdens and uneven healthcare access, especially in rural and underserved areas.

The emigration has led to shortages of skilled personnel, particularly specialists, weakening service delivery and reducing the quality and accessibility of care. Despite efforts to stem the trend—such as improving working conditions, offering financial incentives, and engaging diaspora health workers—migration persisted, further straining Nigeria's health infrastructure.

Research shows that high emigration rates reflect systemic issues like underfunded health sectors and inadequate training, particularly in sub-Saharan Africa. Migration is part of a broader "brain drain" phenomenon, which diminishes Nigeria's capacity to meet domestic health needs and hampers efforts to strengthen its health system amidst increasing disease burdens. Addressing these challenges requires sustained policy interventions focused on improving local working conditions, training, and retention strategies to ensure health service continuity in Nigeria.

Table 4.1: Trend of Migration of Medical practitioners in Nigeria:

S/N	YEAR	NUMBER OF MIGRATED MEDICAL PRATIONERS
1.	2015	233
2.	2016	279
3.	2017	475
4.	2018	NA
5.	2019	1,347
6.	2020	833
7.	2021	932
8.	2022	1,197
9.	2023	1,616

Source: Authors Compilation from different media source

In Nigeria, the emigration of healthcare workers has increased significantly since the early 2000s, driven by economic, political, and infrastructural challenges such as poor funding, corruption, and insecurity (Adepoju, 2016). Between 2015 and 2020, about 10,000 Nigerian doctors migrated to

countries like the UK, US, and Canada, deepening the shortage of skilled professionals, especially in rural areas (Olufunmilayo et al., 2020). Globally, Low- and Middle-Income Countries (LMICs) face disproportionate losses of health workers due to structural issues like inadequate governance and lack of professional development opportunities (Stilwell et al., 2003). This migration disrupts service delivery, depletes expertise, and hampers efforts toward equitable healthcare. High-income countries' aggressive recruitment policies further intensify the brain drain, creating a global imbalance in health workforce distribution (Bach, 2003). Addressing these root causes and developing policies to retain health workers are crucial for improving health outcomes both locally and globally (Kingma, 2007).

Table 4.2: Summarizing the relationship between emigration rates and the shortage of specialized professionals in key health sectors in Nigeria between 2015 and 2023.

Year	Emigration Rate of Healthcare Professionals	Specialized Health Sector Affected	Impact of Emigration	Shortage of Professionals
2015	7,000+ (doctors and nurses)	Healthcare (Doctors, Nurses)	Increased vacancies in hospitals, clinics, and healthcare centers	40% of medical staff positions unfilled
2016	8,000+	Healthcare (Medical Specialists, Nurses)	Reduced capacity to deliver healthcare services, longer patient wait times	45% shortage in specialized medical roles
2017	9,000+	Healthcare (Surgeons, Anesthetists)	Decreased surgical operations and elective procedures	50% deficit in surgical and critical care staff
2018	10,000+	Healthcare (General Practitioners)	Increased burden on remaining staff, lower quality of care	55% shortage in general practitioners
2019	12,000+	Healthcare (Specialist Doctors)	Delay in specialized treatments, reliance on foreign-trained professionals	60% shortage in specialized doctors
2020	13,000+	Healthcare (All Sectors)	Increased brain drain due to economic challenges, COVID-19 pandemic	65% shortage in healthcare staff
2021	15,000+	Healthcare (Nurses, Paramedics)	Healthcare facilities operating at reduced capacity, high patient load	70% shortage in nursing and emergency services
2022	17,000+	Healthcare (Doctors, Nurses, Technicians)	Strain on healthcare infrastructure, reliance on non-specialist staff	75% shortage in critical care and technical roles

2023	20,000+	Healthcare (Medical Specialists, Nurses)	Inability to meet national healthcare demand, reliance on expatriates	80% shortage in medical and allied health staff
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The shortage of specialized healthcare professionals remains a critical challenge for health systems worldwide, particularly in developing countries like Nigeria. Specialists such as surgeons, anesthesiologists, obstetricians, and radiologists are essential for diagnosing and managing complex health conditions, and their absence significantly impacts health outcomes, especially in areas requiring advanced care. The imbalance between demand and supply stems from limited training infrastructure, high costs of specialization, and migration of skilled professionals seeking better opportunities abroad (Buchan, 2015; Mullan, 2005).

In Africa, Oni and Omiunu (2014) highlight that this shortage leads to disparities in access to quality care, notably for conditions like cancer and cardiovascular diseases. Nigeria, in particular, faces acute deficits in fields such as radiology, obstetrics, and surgery, which are vital for reducing maternal and child mortality. Despite an expanding general workforce, specialized fields lag behind, resulting in long wait times, overcrowding, and overburdened health facilities (Adepoju, 2016). Factors such as inadequate investment in training programs, poor infrastructure, and limited funding further hinder the development of a robust specialist workforce.

Migration exacerbates the shortage, with many Nigerian doctors and specialists leaving for countries like the UK, US, and Canada due to better wages, working conditions, and career prospects (Adepoju, 2016; Olufunmilayo et al., 2020). Between 2015 and 2020, approximately 10,000 Nigerian doctors migrated, deepening the local deficit of skilled professionals (Olufunmilayo et al., 2020). This brain drain depletes the scarce pool of specialists needed to manage high-demand areas such as maternal health, surgery, and radiology, creating a vicious cycle where shortages worsen, and healthcare delivery suffers (Bach, 2003; Oni and Omiunu, 2014).

The systemic issues—low salaries, poor working conditions, limited professional advancement—drive migration and hinder retention (Stilwell et al., 2003). Nigeria's health sector produces many general practitioners but remains critically short of specialists, especially in rural and underserved regions, exacerbating health inequities (Kingma, 2007). Addressing this crisis requires significant investment in training infrastructure, improved working conditions, and policies that retain professionals. Strengthening local capacity and creating incentives for specialists are essential to ensuring accessible, quality healthcare for Nigeria's growing population.

In conclusion, the emigration rates and shortage of specialized professionals in key health sectors in Nigeria are interconnected challenges that undermine the country's ability to provide high-quality healthcare. The migration of skilled professionals, particularly specialists, exacerbates the shortage, creating a vicious cycle that affects health outcomes, especially in critical sectors such as surgery, obstetrics, and radiology. Tackling these issues requires comprehensive policies that focus on retaining healthcare professionals, expanding training opportunities, and improving the overall working conditions within Nigeria's healthcare system.

4.2 Health workforce shortages and Delayed and abandonment health projects due to skill gaps:

Health workforce shortages in Nigeria are a longstanding challenge, exacerbated by systemic issues such as underfunding, poor working conditions, and brain drain. These shortages have severe implications for healthcare delivery, reducing access to quality care and contributing to poor health outcomes. Oluwafemi et al. (2020) highlight that the COVID-19 pandemic intensified the exodus of healthcare workers from Nigeria. The authors note that a significant proportion of Nigeria's medical workforce migrates due to inadequate remuneration and poor working environments. They argue that this migration affects both clinical services and medical education in the country. Similarly, Misau, Al-Sadat, and Gerei (2010) discuss how the brain drain has left many healthcare facilities understaffed, undermining efforts to meet the health needs of the population. Damilola (2018) points out that Nigerian nurses, in particular, have been migrating in increasing numbers. The study emphasizes that wage disparities between Nigeria and destination countries, such as the UK and Saudi Arabia, are a major driver of this trend. The author suggests that improving working conditions and offering competitive salaries could help mitigate the migration crisis.

Table 4.3: Vacancy Rates in Nigerian Healthcare Sector Due to Workforce Migration (2015–2023)

S/N	YEAR	Percentage of Vacancy
1.	2015	25%
2.	2016	23.4%
3.	2017	27%
4.	2018	27.5%
5.	2019	29%
6.	2020	32%
7.	2021	33%
8.	2022	35%
9.	2023	38%

Source: Satista (2023)

Nigeria's health workforce crisis remains severe, characterized by inadequate training, poor working conditions, and a significant emigration of health professionals seeking better opportunities abroad, especially since the COVID-19 pandemic. The WHO estimates that Nigeria has only about two doctors, nurses, and midwives per 1,000 people, well below the threshold needed for Universal Health Coverage. Despite initiatives like the Yayale Ahmed Presidential Committee on Health, implementation has been slow, and the migration of thousands of professionals—such as the 5,000 doctors who left in August 2021—continues to create critical

gaps in service delivery. This exodus is driven by low remuneration, inadequate facilities, and limited career advancement, and is compounded by frequent strikes over salaries and working conditions, which further disrupt healthcare services across the country.

Table 4. 4: Estimated Number of Nigerians Living Abroad

Year	Estimated Number of Nigerians Abroad
2000	320,000
2020	1,000,000

Peoples Gazette Nigeria

Poor leadership and governance in Nigeria's health sector significantly contribute to workforce challenges, with issues like delayed salaries, inadequate training, and political interference in recruitment demotivating health workers and leading to less qualified personnel being appointed, which weakens system capacity (Oleribe et al., 2018; Research Square, 2023). These shortages impair the country's ability to meet health targets, especially in maternal and child health, causing burnout among remaining staff and limiting access to care due to reliance on out-of-pocket payments, thereby deepening health inequalities. Additionally, systemic inefficiencies, skill gaps, and poor project management result in delayed or abandoned health initiatives, including the National Strategic Health Development Plan (NSHDP), which struggles with funding constraints and lack of skilled personnel to implement policies effectively (Okpala, 2020; Uneke et al., 2019; Health Policy and Systems Research, 2021). Political interference and bureaucratic bottlenecks further hinder progress, underscoring the need for targeted investment in human resource development and stronger project management frameworks to improve accountability and system efficiency (Oleribe and Taylor-Robinson, 2016).

Table 4.5: Remittance Inflows to Nigeria (2018-2023)

Year	Remittance Inflows (USD billions)
2018	24.0
2019	Data not specified
2020	Data not specified
2021	19.6
2022	20.6
2023	20.0

Source: Statista 2023

Nigeria's health system is critically weakened by shortages of skilled professionals, primarily due to the "brain drain" driven by poor working conditions and wage disparities, which leads to overstretched services and limited access to care, especially in rural areas (Oluwafemi et al., 2020; Misau, Al-Sadat, and Gerei, 2010). These shortages hinder the country's ability to meet health targets and contribute to high morbidity and mortality rates. Simultaneously, many health projects are delayed or abandoned due to poor project management and a lack of technical expertise, exemplified by the stalled National Strategic Health Development Plan (Uneke et al., 2019). Both issues are interconnected, as a skilled human capital base is essential not only for clinical service delivery but also for successful implementation and sustainability of health initiatives. Addressing these challenges requires strategic investments in human resource development and governance reforms, including strengthening training programs and fostering partnerships to bridge skill gaps, thereby improving project outcomes and retaining health professionals within Nigeria.

4.3 Health system performance and Increased Workload and burnout among remaining professionals:

Nigeria's decentralized health system faces significant challenges in providing equitable care, with rural areas hindered by physical and financial barriers, high poverty levels, and disparities in quality and infrastructure (Ajayi et al., 2020; Aregbeshola & Khan, 2018; Onwujekwe et al., 2019). The country allocates less than 5% of GDP to health, far below WHO recommendations, impacting progress toward global health targets like maternal and child health, with maternal mortality remaining high (WHO, 2018; World Bank, 2023). Additionally, nurse burnout is prevalent, driven by high stress levels, emotional exhaustion, and job demands, which compromise care quality and affect nurses' well-being (Mudallal et al., 2017; Granek & Nakash, 2022; Molina-Praena et al., 2018).

Table 5.5 : Nigerian Migrant Professionals and Knowledge Transfer Initiatives

Category	Details	Impact	Sources
High Number of Migrant Professionals			

Estimated Professionals in the U.S.	Over 213,000 Nigerian immigrants, many in healthcare, engineering, and IT fields (2013).	Significant expertise in critical sectors abroad.	<u>Migration Policy Institute</u>
Healthcare Professionals in the U.K.	Nigeria contributed the second-highest number of foreign healthcare workers to the U.K. (2022).	Reduced availability of skilled workers in Nigeria's healthcare sector.	IOM Nigeria
IT & Engineering in Canada	Nigerian professionals represent a growing proportion of IT and engineering immigrants.	Expertise in technology and innovation sectors abroad.	<u>World Bank Reports</u>
Knowledge and Skills Transfer			
Migration for Development in Africa (MIDA)	A program facilitating diaspora experts to contribute to capacity building in Nigeria.	Training and mentoring opportunities for local professionals.	<u>IOM</u>
Nigerian Diaspora Direct Investment Summit (NDDIS)	Annual event promoting investments and skills transfer by Nigerian professionals abroad.	Stimulates collaboration between diaspora and local industries.	<u>NDDIS Official Reports</u>
Technology Transfer Initiatives	Collaboration between Nigerian tech hubs and diaspora innovators.	Growth in start-up ecosystems and skill development in technology.	<u>TechCabal Reports</u>
Challenges			

Brain Drain	High emigration rates among Nigerian professionals in healthcare and education.	Shortages in critical sectors within Nigeria.	<u>ILO Reports</u>
Limited Policy Framework	Inadequate national structures to engage and integrate diaspora expertise effectively.	Missed opportunities for sustainable development through skills transfer.	<u>World Bank Reports</u>
Policy Recommendations			
Structured Engagement Programs	Create sustainable pathways for diaspora professionals to mentor and contribute remotely.	Continuous knowledge and skills transfer to local professionals.	<u>IOM Policy Recommendations</u>
Incentives for Returnees	Offer attractive packages for returning professionals to reintegrate into local industries.	Enhanced domestic workforce with global expertise.	<u>Nigerian Government Policy Documents</u>

Source: Obi (2022)

Burnout among emergency room nurses results from prolonged exposure to stressful work environments, with factors like excessive workloads, staff shortages, and emotional strain contributing to chronic stress and high turnover rates, often referred to in Nigeria as "the Japa Syndrome." Despite a growing demand for nurses, increased employment has exacerbated workload pressures, leading to burnout and reduced well-being (Kim & Silchoi, 2016; Diehl et al., 2021; Babapour et al., 2022). Countermeasures such as adequate staffing, supportive leadership, effective resource management, and targeted training programs focusing on stress management and communication can mitigate burnout and improve job satisfaction (Schlak et al., 2021; Aryankhesal et al., 2019; Boamah et al., 2022). Emotional support, peer counseling, and fostering a healthy work-life balance are also critical in reducing stress levels and enhancing nurses' resilience (Zhang et al., 2023; Delgado et al., 2022).

5. HEALTH CARE TURNOVER RATE AND FOREIGN REMITTANCE IN NIGERIA

The healthcare turnover rate in Nigeria refers to the frequency at which healthcare professionals, such as doctors, nurses, and other medical staff, leave or change their jobs within the country. This issue has become a significant challenge, as many healthcare workers migrate abroad in search of better opportunities, improved working conditions, and higher salaries. This brain drain affects the quality and accessibility of healthcare in Nigeria, exacerbating the country's existing healthcare challenges. In contrast, foreign remittances from the Nigerian diaspora provide a crucial economic lifeline for many households in the country. While these remittances mainly support personal and family needs, they also play a role in addressing healthcare costs. Families receiving remittances may use the funds to pay for medical expenses, improve access to private healthcare, or send members abroad for specialized treatment. Despite the economic importance of remittances, the ongoing healthcare turnover rate highlights a structural issue within Nigeria's healthcare system that foreign remittances alone cannot solve. Together, these two factors underline the complex interplay between the migration of healthcare workers and the financial support sent home by the diaspora.

5.1 Salary Disparities and Remittance inflow rate

Salary disparities play a significant role in encouraging the migration of healthcare professionals, particularly from low- and middle-income countries (LMICs) to high-income countries. This phenomenon, often termed the "brain drain," has critical implications for the health systems of the source countries, as it exacerbates shortages of skilled personnel and undermines the delivery of quality healthcare services.

Healthcare professionals in LMICs often face significant wage gaps compared to their counterparts in high-income countries. For instance, Clemens and Pettersson (2008) noted that doctors and nurses in sub-Saharan Africa earn a fraction of the salaries offered in Western Europe or North America. These wage disparities are compounded by poor working conditions, lack of career advancement opportunities, and inadequate facilities in many LMICs, making migration an attractive option for healthcare workers seeking better financial stability and professional growth.

Table 5. 1: Remittance Inflows as Percentage of GDP

Year	Percentage of GDP
2016	4.87%
2017	5.86%
2018	6.12%
2019	5.31%
2020	3.98%

In Nigeria, for example, Okafor and Chimereze (2021) highlighted that doctors earn an average monthly salary far below what is offered in countries like the United Kingdom, the United States, or Canada. This disparity has been a significant driver of emigration, with many Nigerian doctors opting for opportunities abroad where their skills are better compensated. The migration of healthcare professionals has further strained Nigeria's healthcare system, contributing to a doctor-patient ratio far below the World Health Organization's recommended levels.

Salary disparities also influence migration trends within regions. For example, health professionals may move from rural areas to urban centers or from public healthcare systems to private ones within the same country, driven by the lure of better pay and working conditions. Mullei et al. (2010) observed this trend in Kenya, where internal migration has left rural health facilities severely understaffed, further widening health inequities.

Addressing the issue of salary disparities requires a multifaceted approach. Increasing wages for healthcare professionals in LMICs to levels that are competitive on the global stage is crucial. Scholars like Aluttis et al. (2014) argue that governments must also invest in improving working conditions, providing career development opportunities, and enhancing the overall quality of healthcare systems. Furthermore, international cooperation, such as agreements to manage health worker migration ethically, as proposed by the World Health Organization's Global Code of Practice on the International Recruitment of Health Personnel, is essential in mitigating the adverse effects of this trend.

Table 5. 2: Remittance Inflows to Nigeria (2018-2023)

Year	Remittance Inflows (USD billions)
2018	24.0
2019	Data not specified
2020	Data not specified
2021	19.6
2022	20.6
2023	20.0

Source: [Statista](#) 2023

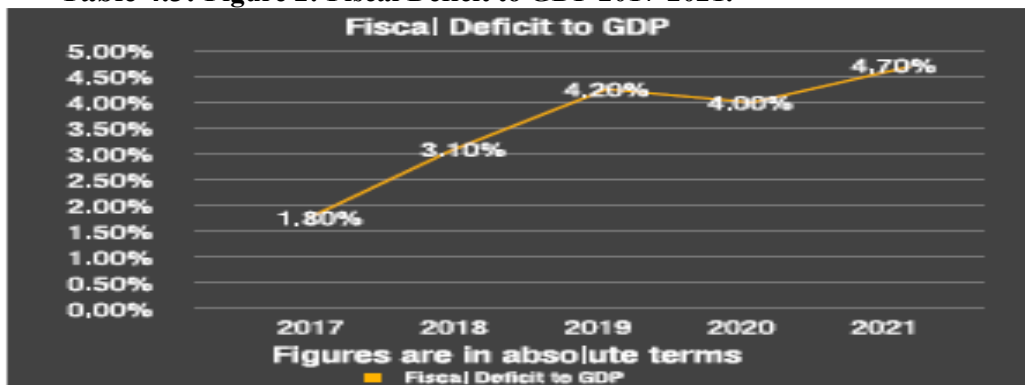
Salary disparities in low- and middle-income countries (LMICs) reflect deeper systemic inequalities and inefficiencies within healthcare systems, serving as a significant "push" factor for healthcare worker emigration, as highlighted by Adzei and Atinga (2012). Many professionals earn insufficient wages to meet basic needs, with irregular salary payments further eroding trust and job satisfaction (WHO, 2016), leading to a cycle of brain drain that worsens healthcare coverage and patient-to-worker ratios (Okafor & Chimereze, 2021). Nigeria exemplifies this trend, where wage gaps, poor working conditions, and limited career growth push many healthcare workers abroad, especially to neighboring countries like South Africa (Okeke, 2021), with

remittances from emigrants surpassing \$20 billion annually (World Bank, 2022). While remittances provide vital economic support, they also underscore the failure to offer adequate domestic wages and opportunities, perpetuating brain drain and hindering development (Ezeibe, 2022). Addressing these issues requires comprehensive policies that improve salaries and working conditions while leveraging remittance inflows for productive investments to foster sustainable health systems and economic growth.

5.2 Work Environment and Remittance-to-GDP Ratio

The work environment plays a pivotal role in the migration of healthcare professionals from low- and middle-income countries (LMICs), where inadequate infrastructure, scarce resources, high patient-to-staff ratios, and exposure to health and safety risks foster dissatisfaction and burnout (Nwagboso, 2021). Many healthcare workers operate in underfunded, poorly equipped facilities that hinder the delivery of quality care, prompting them to seek better opportunities abroad. Overcrowded clinics and hospitals with insufficient supplies contribute to frustration and exhaustion, especially in countries like Nigeria, where staffing shortages and heavy workloads are prevalent. These challenging conditions significantly influence healthcare professionals' decisions to emigrate in search of improved working environments, professional development, and safety.

Table 4.3: Figure 2: Fiscal Deficit to GDP 2017-2021.



Studies by Adzei and Atinga (2012) highlight that healthcare workers in Ghana often feel overwhelmed by patient loads that surpass their capacity, alongside limited opportunities for professional growth, prompting many to seek employment abroad where staffing levels and career development prospects are better. Similarly, in Nigeria and other LMICs, substandard working conditions—such as underfunded facilities, outdated equipment, insufficient supplies, and inadequate safety—significantly contribute to healthcare workers' decisions to migrate (Nwagboso, 2021; Ogundele, 2020). High workloads, low wages, lack of career advancement, and safety concerns, especially in conflict zones like Nigeria's insurgency-affected regions, exacerbate job dissatisfaction and drive skilled professionals to seek safer and more supportive environments elsewhere (Alubo, 2016; Akinbami & Omoogun, 2021).

The migration of Nigerian healthcare professionals, spurred by poor working conditions, has a direct economic impact through substantial remittance inflows, which, according to the World

Bank (2022), account for over 6% of Nigeria's GDP. While these remittances support households, reduce poverty, and stimulate local economies, they also reflect systemic failures in Nigeria's healthcare sector and broader economic challenges, such as brain drain and stagnating domestic opportunities (Ndukwe & Chukwu, 2020). This cyclical relationship underscores how inadequate work environments push skilled labor abroad, increasing remittance inflows that temporarily bolster the economy but also highlight the country's inability to retain human capital necessary for sustainable development.

5.3 Work Burnout and Workload Factor and Transfer of technology/investments

The migration of Nigeria's healthcare workforce, often referred to as "medical brain drain," has become a significant challenge, undermining the country's ability to provide adequate healthcare services. This phenomenon involves the emigration of doctors, nurses, pharmacists, and other healthcare professionals to countries such as the United Kingdom, the United States, and Canada in search of better working conditions, higher wages, career advancement opportunities, and improved living standards (Akinyemi & Abiodun, 2021). Several factors drive the migration of healthcare professionals from Nigeria. Poor remuneration and inadequate working conditions are among the most cited reasons. Many Nigerian hospitals face chronic underfunding, leading to shortages of essential medical supplies, outdated equipment, and overcrowded facilities. Uche (2020) notes that the lack of investment in healthcare infrastructure and professional development leaves many practitioners disillusioned and eager to relocate to environments where they can practice more effectively and safely.

Skill Gaps in Key Sectors of the Nigerian Economy (2015–2023)

S/N	SECTOR	PERCENTAGE	SOURCE
1.	Oil and Gas	90% workforce in advance oil exploration and production in Nigeria are expatriates the Nigeria content development and monitoring Board (NCDMB) estimates that less than 20% of technical jobs in the sector are handled by Nigerians	NCDMB (2023)
2.	ICT	50% digital skill gap	NBS (2023)
3.	Manufacturing sector	60% lack in skilled labour only 15% has access to regular training or up skilling	MAN (2023)
4.	Agriculture	30-40%	FAO (2023)
5.	Health sector	1:5000, far below 1:600	WHO (2023)

6.	Educational	40% are trained in modern facilities	UNESCO
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Source: Authors compilation from different sources (2024)

The consequences of this migration are severe. Nigeria suffers from a critical shortage of healthcare workers, with the doctor-to-patient ratio far below the World Health Organization's (WHO) recommended standard. According to WHO (2023), Nigeria has approximately one doctor per 3,500 patients, compared to the recommended ratio of one per 600. This shortage leads to overburdened healthcare professionals, reduced quality of care, and increased patient mortality rates, particularly in rural and underserved areas (Okoye, 2021).

Specialized fields such as surgery, anesthesiology, and oncology are particularly affected by the exodus of healthcare workers. The scarcity of specialists means that patients often face long wait times for critical procedures or must travel abroad for treatment, further straining the country's healthcare system and finances. Amadi and Fadeyi (2020) highlight that medical tourism, driven by the lack of local expertise, costs Nigeria billions of dollars annually, funds that could otherwise be invested in domestic healthcare improvements.

Table 5.6: Vacancy Rates in Nigerian Healthcare Sector Due to Workforce Migration (2015–2023)

S/N	YEAR	Percentage of Vacancy
10.	2015	25%
11.	2016	23.4%
12.	2017	27%
13.	2018	27.5%
14.	2019	29%
15.	2020	32%
16.	2021	33%
17.	2022	35%
18.	2023	38%

Source: Satista (2023)

Efforts to mitigate Nigeria's healthcare worker migration emphasize improving working conditions, offering competitive salaries, and providing opportunities for continuous professional development. Scholars like Onyeani and Adekunle (2020) advocate for increased government investment in healthcare infrastructure and engaging the diaspora through knowledge exchange and temporary service programs. The migration is primarily driven by push factors such as low salaries, poor working conditions, and limited career advancement, compounded by pull factors

like higher wages and better infrastructure in destination countries (Guevara et al., 2017). Studies by Zurn et al. (2004) and Connell (2013) highlight that this “brain drain” results from systemic issues such as underfunded healthcare systems, political instability, and inadequate training, especially in African nations, with Nigeria experiencing a significant outflow of health professionals since the early 2000s due to economic and security challenges (Adepoju, 2016; Olufunmilayo et al., 2020). These migration patterns exacerbate health system disruptions, particularly in rural and underserved areas, creating a cycle where shortages fuel further emigration, making it difficult for LMICs to meet their population’s health needs.

The global shortage of specialized healthcare professionals further strains health systems, especially in developing countries where resources for advanced training and retention are limited. According to Buchan (2015), the demand for specialists like surgeons, radiologists, and obstetricians far exceeds supply, which is worsened by migration to high-income countries offering better wages and working conditions (Bach, 2003). This shortage impacts the quality of care, survival rates, and the management of complex health conditions, particularly in LMICs. The imbalance between the need for specialized services and the capacity to train and retain qualified personnel underscores the importance of targeted investments, improved working environments, and policies that address both domestic workforce development and international migration dynamics to strengthen health systems worldwide.

TABLE 5.7: Nigeria Micro economic Indicator

	Items	2008	2009	2010	2011	2012	2013****
1	Remittance inflows (RI) (USD million)	19,200.00	18,432.00	19,814.40	20,606.98	20,527.92	20,776.32
2	Remittance outflows (RO) (USD million)	(23.28)	(28.71)	(29.04)	(32.51)	(24.22)	(27.60)
3	Remittance net flows (RI – RO) (USD million)	19,176.72	18,403.29	19,785.37	20,574.47	20,503.70	20,748.72
4	Annual growth rate of remittance inflows (%)	7.15	-4.00	7.50	4.00	-0.38	1.21
5	Remittance as a percentage of total financial flows (%)	200.36	201.86	201.23	146.07	84.38	107.87
6	Workers' remittance inflows as a percentage of GDP (%)*	9.37	11.07	8.76	8.48	7.97	7.71
7	Foreign direct investment (FDI) (USD million)***	8,248.64	8,649.53	6,098.96	8,914.89	7,127.38	5,608.46
8	Foreign portfolio investment (FPI) (USD million)***	1,334.30	481.69	3,747.90	5,192.80	17,200.49	13,652.16
9	Total financial flows (FDI + FPI) (USD million)***	9,582.94	9,131.22	9,846.87	14,107.69	24,327.87	19,260.62
10	Balance of trade (exports – imports) (USD million)***	46,219.46	25,669.09	31,771.62	35,002.43	40,925.58	43,767.07
11	Total trade (exports + imports) (USD million)***	126,413.52	87,909.05	125,292.55	159,325.22	147,719.08	146,469.03

Source : Country data 2019.

The migration of Nigeria's healthcare workforce, often referred to as "brain drain," and the resulting increased workload and burnout among the remaining healthcare professionals are deeply interconnected issues that weaken the country’s healthcare system. As many doctors, nurses, and specialists leave in search of better opportunities abroad due to poor working conditions, inadequate pay, and limited professional growth, the remaining staff are forced to handle a growing patient load under stressful and often substandard conditions (Akinyemi & Abiodun, 2021). This escalation in workload leads to physical and mental exhaustion, diminishing their capacity to

deliver quality care and increasing the risk of errors, which further hampers patient outcomes (Amadi & Fadeyi, 2020). The shortage of healthcare workers has created an overburdened system, with the doctor-to-patient ratio falling far below recommended standards, pushing remaining professionals to work longer hours and manage cases that require specialized skills, thereby fueling burnout and job dissatisfaction (Uche, 2020; Okoye, 2021).

This cycle has detrimental effects on both healthcare workers and patient care, as overworked and exhausted professionals become less effective, leading to longer wait times, increased medical errors, and a decline in treatment quality (Amadi & Fadeyi, 2020). The burnout and high attrition rates among healthcare workers perpetuate the shortage, creating a vicious cycle that exacerbates Nigeria's healthcare crisis. Scholars emphasize the importance of multi-faceted interventions, such as improving salaries, work conditions, and infrastructure, as well as engaging the Nigerian diaspora and investing in local training programs to retain talent and alleviate pressures on the existing workforce (Onyeani & Adekunle, 2020; Uche, 2020). Addressing these interconnected issues requires comprehensive strategies aimed at stabilizing the healthcare workforce, improving working conditions, and strengthening the healthcare system to ensure sustainable and quality health services for Nigeria.

6. CONCLUSION AND RECOMMENDATIONS

This study investigated migration and economic development of Nigeria 2015-2023. Migration has been a pivotal aspect of Nigeria's socioeconomic dynamics from 2015 to 2023, reflecting the country's role as a regional hub in West Africa. During this period, migration trends were driven by economic opportunities, political instability, and the search for education and better living conditions. Nigeria witnessed significant emigration, especially among skilled professionals seeking greener pastures abroad, contributing to the phenomenon of brain drain. At the same time, the country attracted migrants from neighboring nations such as Niger, Chad, and Benin, primarily engaged in agriculture, informal trade, and domestic labor. These movements profoundly influenced Nigeria's economy. Remittances from Nigerians abroad became a critical source of foreign exchange, boosting household income and supporting small businesses, while regional migration under ECOWAS frameworks bolstered informal trade. However, challenges emerged, including security concerns due to unregulated border movements, the strain on urban resources, and the loss of skilled labor in key sectors. The period highlighted the dual nature of migration as both an opportunity and a challenge, underscoring the need for effective policy frameworks to maximize its benefits for Nigeria's development.

6.2. Conclusion

Migration between 2015 and 2023 had a profound impact on Nigeria's economic development, shaping both opportunities and challenges. While the emigration of skilled professionals contributed to brain drain, it also led to significant remittance inflows, which became a critical source of foreign exchange and supported household incomes and investments. Nigeria's position as a regional migration hub facilitated labor market contributions and informal trade through the ECOWAS free movement framework, enhancing regional economic integration.

However, challenges such as the loss of skilled manpower in critical sectors, insecurity arising from unregulated migration, and the strain on social and economic infrastructure highlighted the need for strategic policy interventions. Addressing these challenges requires improving local economic conditions, investing in human capital, and strengthening migration governance frameworks to balance the benefits of migration with national development goals. Ultimately,

cross-border migration remains a double-edged sword, and its effective management is key to leveraging its potential for Nigeria's sustainable economic growth.

6.3. Recommendations

1. The Nigerian government implements policies to improve the working conditions, salaries, and career advancement opportunities for professionals within the country. Additionally, creating a conducive environment for innovation and research, along with providing adequate funding for specialized institutions, will help retain talent. The government should also collaborate with the Nigerian diaspora to facilitate knowledge transfer and encourage the return of skilled professionals through targeted incentives. Strengthening healthcare, education, and research infrastructure will further reduce the pull factors that drive emigration. Finally, offering scholarships, grants, and other professional development programs can help maintain a skilled workforce in critical sectors.
2. The Nigerian government should streamline and promote formal remittance channels by collaborating with financial institutions and fintech companies to reduce transfer costs. Additionally, developing diaspora bonds and investment opportunities tailored to Nigerians abroad can channel remittances into national development projects. Expanding the role of the Nigerian Diaspora Commission to provide more direct investment incentives and engagement opportunities for diaspora members would enhance economic ties. Financial literacy programs for remittance recipients should be introduced to ensure better utilization of funds for productive purposes. Lastly, improving data collection on remittance flows can help design more effective policies and track the impact of remittances on the economy.

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